

PATENT COOPERATION TREATY

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P021005WO	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/GB2005/001227	International filing date (<i>day/month/year</i>) 29.03.2005	Priority date (<i>day/month/year</i>) 29.03.2004	
International Patent Classification (IPC) or national classification and IPC INV. H04Q7/22			
Applicant INTELLPROP LIMITED et al			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> <i>sent to the applicant and to the International Bureau</i>) a total of 2 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (<i>sent to the International Bureau only</i>) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>			
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand 27.01.2006		Date of completion of this report 29.03.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Möll, H-P Telephone No. +49 89 2399-8243	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2005/001227

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-8 as originally filed

Claims, Numbers

1-8 received on 31.01.2006 with letter of 27.01.2006

Drawings, Sheets

1/5-5/5 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing *(specify)*:
 - ☐ any table(s) related to sequence listing *(specify)*:

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/GB2005/001227

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-8
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-8
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Cited Documents

1. Reference is made to the following documents:

D1: US-A-6 108 559
D2: US-A-6 654 589
D3: WO 03/049461 A2

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

A. **Clarity** (Article 6 PCT):

1. **dependent Claims 2 and 5:**

Dependent Claims 2 and 5 lack **clarity** within the meaning of Article 6 PCT for the following reason:

1.1 Both dependent **Claims 2 and 5** define that the HLR includes a **settable flag** for controlling the availability of text message processing. Said subject-matter of **Claims 2 and 5** is claimed in combination with that of independent **Claims 1 and 4** which both define that the HLR stores **subscriber specific information** so as to control the availability of text message processing.

Claims 2 and 5 in combination with **Claims 1 and 4** thus convey the impression that two pieces of information are used for controlling the availability of text message processing, namely **subscriber specific information** as well as a **settable flag**.

This is however not supported in the description, where the use of a single field in the HLR subscriber data record, namely the "**class of service field**", is disclosed for this purpose.

1.2 It would have been thus necessary to clearly define in said dependent **Claims 2 and 5** that the **subscriber specific information** defined in independent **Claims 1 and 4**

is implemented as a settable flag stored in the HLR in order to overcome the **clarity** objection (Article 6 PCT).

B. **Novelty / Inventive Step** (Article 33 PCT):

1. independent **Claim 1**:

1.1 It is noted that the document **D3** - cited in the application - is regarded as being the closest prior art to the subject-matter of **Claim 1** and shows a "telecommunications service apparatus for use in a mobile telecommunications network" (**D3**, Figs. 3 and 4: "SMS Router"; page 1, line 29 - page 2, line 6; Claim 1) with the following features as defined in **Claim 1** of the present invention:

- processing means for processing received text messages (**D3**, Claim 1; page 6, lines 14-20)

- call routing means operable to receive a routing information request signal indicative of a text message intended for a mobile terminal (**D3**, Claim 1; page 5, lines 19-28; Fig.3)

- call routing means operable to return a routing information response signal indicative of the telecommunications service apparatus instead of being indicative of the intended mobile terminal (**D3**, Claim 1; page 5, lines 28-32; Fig.3)

1.2 The telecommunications service apparatus defined in present **Claim 1** appears to differ from the disclosure of document **D3** only in that **D3** does not explicitly show that the call routing means is operable to control the availability of processing of the text message based on subscriber specific information [1] and that this subscriber specific information is stored in a HLR of the network [2].

1.3 It would be clear to the person skilled in the art that the telecommunications service apparatus known from **D3** suffers from the drawback that the text message **diversion and processing** functions can not be selectively offered to subscribers. From the disclosure of document **D3** it appears that **either all or none** of the routing information request signals are "intercepted" and **diverted** for subsequent

processing by the telecommunications service apparatus.

- 1.4 In consulting the prior art, the skilled person would come across documents **D1** and/or **D2**, which both disclose a similar technique for **diversion and processing** of mobile terminated short text messages.

Both documents **D1** and **D2** explicitly disclose to selectively activate said **diversion and processing** function for mobile terminated short messages by consulting subscriber specific information ("marked subscribers/flagged subscribers") stored in the HLR of the subscriber. Reference is made to **D1**, *col.5, lines 24-30* and **D2**, *col.5, lines 4-8*. Both documents **D1** and **D2** thus disclose features [1] and [2] of independent **Claim 1** as identified above under item 1.2.

- 1.5 To a skilled person, therefore, starting from the telecommunications service apparatus defined by **D3** and being aware of the disclosure of **D1** or **D2**, it would be obvious to apply the approach described in **D1** or **D2** to the telecommunications service apparatus of **D3**, in order to allow subscriber selective activation of the **diversion and processing** function and he would thus arrive at a telecommunications service apparatus corresponding to the subject-matter of **Claim 1**.

The subject-matter of **Claim 1** therefore lacks an **inventive step** within the meaning of Article 33(3) PCT.

- 1.6 It is in addition noted that documents **D1** and **D2** do no longer prejudice **novelty** (Article 33(2) PCT) of independent **Claim 1**, since **Claim 1** explicitly defines that the **diversion function**, the **control of availability of the processing function** as well as the **processing function** are all carried out by the same entity, namely by the telecommunications service apparatus.

In documents **D1** and **D2** it is the HLR which carries out the **diversion function** and it is a different entity (**D1**: "SMSC-B"; **D2**: "Legal Interception Node-LIN") to which the text message is sent for further **processing**.

Independent **Claim 1** is thus **novel** vis-à-vis both documents **D1** and **D2** (Article 33(2) PCT).

2. dependent **Claims 2 and 3**:

2.1 The additional features of dependent **Claims 2 and 3** do not add anything of **inventive significance** (Article 33(3) PCT) to those claims to which they are appended, as they refer only to minor implementing details which are disclosed in or obviously derivable from the cited prior art references **D1**, **D2** or **D3** or fall within the general knowledge of a person skilled in the art:

(a) **Claim 2**:

D1, col.5, lines 24-30

D2, col.5, lines 4-8

(b) **Claim 3**:

D3, page 6, lines 17-20

D1, col.3, lines 31-37 and 48-53; "... media conversion, ... copying and distribution ..."

D2, col. 5, lines 57-59; "... a short message SM is sent to the LIN which forwards it to the SGSN and sends a copy thereof to the LEA ..."; Fig.3: "step 3-9"

2.2 The dependent **Claims 2 and 3** do thus not meet the requirements of Article 33(3) PCT.

3. independent **Claim 4** and dependent **Claims 5 and 6**:

3.1 The features of independent **Claim 4** and dependent **Claims 5 and 6** ("telecommunications services method") correspond to the features of independent **Claim 1** and dependent **Claims 2 and 3** ("telecommunications service apparatus").

3.2 The arguments concerning **novelty** (Article 33(2) PCT) and **inventive step** (Article 33(3) PCT) as set out above regarding **Claims 1-3** therefore equally apply to said **Claims 4-6** respectively, which do thus also not meet the requirements of Article 33(3) PCT.

4. re **Claims 7 and 8**:

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/GB2005/001227

- 4.1 The features of independent **Claims 7 and 8** ("computer program" and "computer program product") correspond to the features of independent **Claims 4-6** ("method"). Independent **Claims 7 and 8** do not provide any additional technical features. The arguments concerning **novelty** (Article 33(2) PCT) and **inventive step** (Article 33(3) PCT) as set out above regarding **Claims 4-6** therefore equally apply to said **Claims 7 and 8**, which do thus also not meet the requirements of Article 33(3) PCT.

C. Further Deficiencies / Defects:

1. The independent claims are not draft in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art document **D3** being placed in a preamble (Rule 6.3(b)(I) PCT) and with the remaining features being included in a characterising part (Rule 6.3(b)(ii) PCT).
2. Contrary to the requirements of Rule 5.1.(a) (ii) PCT, the relevant background art disclosed in the documents **D1** and **D2** noted above is not mentioned in the description, nor are these documents identified therein.
3. The opening part of the description has not been brought into agreement with the wording of the Claims (Rule 5.1 (a) (iii) PCT).

CLAIMS

1. A telecommunications services apparatus for use in a mobile telecommunications network, the apparatus comprising:
- 5 processing means for processing received text messages; and
call routing means operable:
to receive a routing information request signal indicative of a text message intended for a mobile terminal;
to return a routing information response signal indicative of the
10 telecommunications services apparatus instead of being indicative of the intended mobile terminal; and
to control availability of processing of the text message based on subscriber specific information;
wherein the network includes a home location register storing said subscriber
15 specific information so as to control the availability of text message processing.
2. Apparatus according to claim 1, wherein the home location register includes a settable flag for controlling the availability of the text message processing.
- 20 3. Apparatus according to claim 1 or claim 2, wherein the text message processing includes copying and/or diversion of the text message, interception of the text message, providing location privacy, anti-spam protection, access to diverted messages, and/or access to messages from other messaging systems.
- 25 4. A telecommunications services method for a mobile telecommunications network, the method comprising:
receiving in a telecommunications services apparatus a routing information request signal indicative of a text message intended for a mobile terminal;
returning a routing information response signal indicative of the
30 telecommunications services apparatus instead of being indicative of the intended mobile terminal; and

controlling availability of processing of the text message based on subscriber specific information;

wherein the network includes a home location register storing said subscriber specific information so as to control the availability of text message processing.

5

5. A method according to claim 4, wherein the home location register includes a settable flag for controlling the availability of the text message processing.

6. A method according to claim 4 or claim 5, wherein the text message processing
10 includes copying and/or diversion of the text message, interception of the text message, providing location privacy, anti-spam protection, access to diverted messages, and/or access to messages from other messaging systems.

7. A computer program having computer executable instructions, which when
15 loaded on to a computer is operable to cause the computer to perform the method according to any one of claims 4 to 6.

8. A computer program product having a computer readable medium having
recorded thereon information signals representative of the computer program
20 according to claim 7.